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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/688,657	10/16/2000	Enrique Hernandez-Valencia	18-1	1470

7590 02/03/2005

Docket Administrator (Room 3C-512)  
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EXAMINER

QURESHI, AFSAR M

ART UNIT	PAPER NUMBER
2667	

DATE MAILED: 02/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/688,657	HERNANDEZ-VALENCIA ET AL	
	Examiner	Art Unit	
	Afsar M Qureshi	2667	

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 25-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-14 and 25-28 is/are allowed.
- 6) ☒ Claim(s) 1,3-7,15 and 17-20 is/are rejected.
- 7) ☒ Claim(s) 2 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

***Response to Amendment***

1. This action is responsive to amendment/Remarks received on August 30, 2004.  
Claims 21-24 are cancelled; amendment to claims 25, 27 and 28 is entered as requested.
2. In light of amendments, the rejection of claims 25-28, under 35 U.S.C. 101, is withdrawn.

***Specification***

3. The disclosure is objected to because of the following informalities:  
On page 3, line 8, "8b/10" should be -- 8b/10b -- as evident from Summary, page 1, line 23, 26 and Specification page 7, line 6, etc.  
Similarly, on page 4, line 30, there are two ")))" instead of only one -- ) --.  
These appear to be typographical errors. The Examiner requests that Applicant should read through the entire text of the specification and make appropriate corrections.

***Claim Objections***

4. Claims 3 and 17 are objected to because of the following informalities:  
The Applicant claims "bit/byte" in these claims. However, in the Specification and the above argument it is "byte/bit". Appropriate correction is required.
5. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

Claims 1, 3-7, 15, 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azizoglu et al. (US 6,430,201) in view of the admitted prior art, by Doshi et al., "A Simple Data Link (SDL) Protocol for High-Speed packet Networks".

Claims 1 and 15. Azizoglu et al. ('Azizoglu' hereinafter) disclose an 8b/10b code 22-1 for decoding data from upper layer (*decoding block encoded data for removing the block encoding for removing the block encoding from the data* (claim 1), *a decoder operative on block-encoded data for removing the block encoding from the data* (claim 15). See fig. 3, also col. 4, lines 42-44. However Azizoglu does not specifically disclose the claim limitations '*mapping the data into a variable length protocol data unit (PDU) for transmission over a synchronous transport medium, as in claim 1, and a mapper for mapping the data into a variable length protocol data unit (PDU) for transmission over a synchronous transport medium, as in claim 15.*

Doshi et al. ('Doshi' hereinafter), in the same field of endeavor, disclose SDL frame over SONET comprising a Length Indicator field and a variable length Information field. See fig. 3, SDL Frame Format, page 7, section 1, Length Indicator Field, lines 1-2, and section 4, Information Field, lines 4-5.

Therefore, it would have been obvious to those having ordinary skill in the art, at the time of invention, to remove the block encoding from the data and to map the data into a variable length PDU, such as SDL, for couple of reasons. Firstly, removing blocking encoded information from the block encoded data will allow multiple signals, such as multiple GbE or Fibre Channel, to be carried on a signal OC-48 transport signal as taught by Azizoglu et al. (see col. 3, lines 40-43). Secondly, one of the key motivations of using SDL is to replace the HDLC to transport the upper layer data over the SONET medium. Since the HDLC uses flags with bit stuffing operation for frame boundary delineation. The bit stuffing operation expands offered load. This causes

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interferences with the QoS management as taught by Doshi et al. See page 2, second paragraph, lines 11-13.

Claims 3, 4, 17, and 18. Azizoglu further discloses that the signals are being mapped via a SONET Framer 26 into byte synchronous SONET OC-48 medium for transport. See fig. 2, and col. 4, lines 60-62.

Claims 5 and 19. Doshi further discloses the PDU of a Simplified data Link, SDL comprises a header portion and a payload portion. See fig. 3, SDL Frame Format, and page 7, Offset Field section, second paragraph, lines 1-3.

Claims 6 and 20. Azizoglu et al. further discloses the decoding step of receiving an Optics GbE/FC fibre channel signal representing the block encoded data; and decoding the signals via 8B/1013 codec 22-1 for removing the block encoding from the data. See fig. 3 and col. 4, lines 42-44.

Claim 7. Although Azizoglu et al. does not explicitly disclose the decoding step of receiving an enterprise systems connection, ESCON, signal representing the block encoded data; and decoding the signal for removing the block encoding from the data, nonetheless, it is common practice in the art that the ESCON uses similar decoding scheme as the gigabit Ethernet and fibre channel. Therefore, it would have been obvious to those having ordinary skill in the art, at the time of invention, to include the ESCON into the system since there are huge number ESCON based computer network and system installations built by IBM and others since early 1990s.

### ***Allowable Subject Matter***

6. Claims 2 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 8-14 and 25-28 are allowed over prior art of record.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of art of record fails to disclose method steps of determining whether the data represents a control frame type or a data frame type (*type field of the PDU data in a payload portion*) and comparing the determined type to a type of previously decoded block of data.



### ***Response to Arguments***


8. Applicant's arguments filed in August 30, 2004, in reference to claims 1, 3-7, 15 and 17-20 have been fully considered but they are not persuasive.

In reference to claim 1, as interpreted in its broadest terms, the Examiner contends that all the limitations, *decoding and mapping variable length data*, are met by the cited art in combination. The Examiner believes that further limitation of determining the *type field*, as in claims 2 and 16, distinguishes the current invention from the cited art of record. Other arguments in reference to claims 8, 10, 25, 27 and 28 are moot in view of the allowance.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Afsar M Qureshi whose telephone number is (571) 272 3178.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272 3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
2/11/2005  
**AFSAR QURESHI**  
**PRIMARY EXAMINER**